# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/022,427 | 12/20/2001 | Akira Uematsu | NEC-F115/USA | 5197 |

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YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

| EXAMINER |
|---|
| ROBERTS, BRIAN S |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2662 | |

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/022,427 | UEMATSU, AKIRA |
| | Examiner | Art Unit |
| | Brian Roberts | 2662 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>20 December 2001</u>.

2a)☐ This action is **FINAL**.    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-9</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-9</u> is/are rejected.

7)☒ Claim(s) <u>3-5 and 8</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>20 December 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All　b)☐ Some * c)☐ None of:

　　　1.☒ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

- Claims 1-9 have been examined.

### *Drawings*

1.      Figure 17 should be designated by a legend such as --Prior Art-- because only

that which is old is illustrated.  See MPEP § 608.02(g).  Corrected drawings in

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

### *Specification*

2.      The title of the invention is not descriptive.  A new title is required that is clearly

indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 112*

3.      The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.      Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

- In reference to claim 1

Claim 1 recites the limitations "that individual terminal" in line 8 and "that

duplication of terminal identifiers" in line 10. There is insufficient antecedent basis for

this limitation in the claim. It is unclear and undefined as to which "individual terminal"

and "duplication of terminal identifiers" "that" is referring to.

- In reference to claim 2

Claim 2 recites the limitation "the means for issuing notification" in line 2. There

is insufficient antecedent basis for this limitation in the claim.

- In reference to claim 3

Claim 1 recites the limitation "that individual terminal" in line 6. There is

insufficient antecedent basis for this limitation in the claim. It is unclear and undefined

as to which "individual terminal" "that" is referring to.

- In reference to claims 6 and 9

Claims 6 and 9 recite the limitation "the physical identifier" in line 7 and 14.

There is insufficient antecedent basis for this limitation in the claim. Further, claim 9

does not end with a period ".".

- In reference to claims 4,5,7 and 8

Claims 4,5,7 and 8 and rejected as being dependent on rejected parent claims.

### Claim Rejections - 35 USC § 103

5.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.     Claims 1-2, 6-7, and 9 are rejected under 35 U.S.C. 103(a) as being

unpatentable over the admitted prior art in view of Marbaker et al. (US 5229988).

- In reference to claim 1

In Figures 16, 17 and 20, the admitted prior art teaches a wireless

communication system and an auto IP method that includes:

- An IP address (terminal) identification means for identifying any other terminal

  with which an individual terminal itself communicates using the IP address

  (terminal identifier) of another terminal

- A duplication notification means that operates when a individual terminal

  detects the existence of another terminal having the same IP address

  (terminal identifier) as itself to issue notification of a duplication of an IP

  address (terminal identifier) to the other terminal

The admitted prior art does not explicitly teach a substitute notification means as in claim 1.

In Figure 7, Marbaker et al. teaches a substitute notification means wherein an network analyzer 302 (individual terminal) detects multiple other nodes 108,110 (terminals) that the analyzer can communicate with having the same IP source address (terminal identifier) but differ from the IP address of the analyzer 302, the analyzer 302 notifies the duplication of IP addresses to the nodes 108,110. (column 6 lines 12-65)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of the admitted prior art to include a substitute notification means as taught by Marbaker et al. because it would allow the terminals in the network to detect other terminals with duplicate IP addresses so that new IP addresses can be assigned to the terminals.

- In reference to claim 2

The combination of the admitted prior art and Marbaker et al. teaches a system and method that covers substantially all limitations of the parent claim. The admitted prior art further teaches:

- In Figure 17, A selection means where at startup, the terminal randomly selects its own IP address through an IP address selection part 30 (pg 2 line 10-11)

- • In Figure 17, an inquiry means where a duplication detection packet as shown in Fig. 15 is assembled for detecting whether or not the IP address thus input is already in use on the network (pg. 2 lines 13-16)

- • In Figures 17 and 20, a means for repeating selection of a IP address using the IP address selection part 30 (pg. 4 lines 1-2)

- In reference to claim 6

The combination of the admitted prior art and Marbaker et al. teaches a system and method that covers substantially all limitations of the parent claim. The admitted prior art further teaches:

- • In Figure 15 and 17, an advertising means where the terminal transmits a duplicate detection packet to all terminals and where the duplicate detection packet contains the terminal's IP address (terminal identifier) (pg 1 lines 19-26)

- • In Figures 17 and 20, a means for selecting a new IP address using the IP address selection part 30 when a terminal has the same IP address (pg. 4 lines 1-2)

- In reference to claim 7

The combination of the admitted prior art and Marbaker et al. teaches a system and method that covers substantially all limitations of the parent claim.

The admitted prior art does not explicitly teach a notification means as in claim 7.

In Figure 7, Marbaker et al. teaches a substitute notification means wherein an network analyzer 302 (individual terminal) detects multiple other nodes 108,110 (terminals) that the analyzer can communicate with having the same IP source address (terminal identifier) but differ from the IP address of the analyzer 302, the analyzer 302 can notify the duplication of IP addresses to the nodes 108,110 even if the nodes can not communicate with each other. (column 6 lines 12-65)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of the admitted prior art to include a notification means as taught by Marbaker et al. because it would allow the terminals in the network to detect other terminals with duplicate IP addresses even when the terminals containing the duplicate IP address can not communicate with each other.


- In reference to claim 9

In Figures 16, 17 and 20, the admitted prior art teaches a wireless communication system and an auto IP method that includes:

- An IP address (terminal) identification means for identifying any other terminal with which an individual terminal itself communicates using the IP address (terminal identifier) of another terminal

- In Figure 15 and 17, an advertising means where the terminal transmits a duplicate detection packet to all terminals and where the duplicate detection packet contains the terminal's IP address (terminal identifier) (pg 1 lines 19-26)

- In Figures 17 and 20, a means for selecting a new IP address using the IP address selection part 30 when a terminal has the same IP address (pg. 4 lines 1-2)

## *Allowable Subject Matter*

7.      Claims 3-5 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

- In reference to claim 3

Claim 3 would be allowed because the prior record fails to teach or fairly suggest a wireless communication system wherein the network on which said multiple terminals are connected is an IP (Internet Protocol) network utilizing IP addresses for terminal identifiers and wherein:

- Said inquiry means includes a means for broadcasting notification in the form of a duplication inspection packet recording the IP address of said individual terminal and a unique physical identifier for that individual terminal to another terminal or terminals on the network;

- Said terminal identification means provides an address coordination table that, for a specified time, holds the coordination between the IP address of each other terminal on said IP network and a physical identifier unique to each said other terminal and provides a registration means that operates when a sender and IP address of a duplication notification packet received by

said individual terminal from any other terminal is different to the IP address

of said individual terminal itself, moreover said sender IP address is not

registered in said address coordination table, to register said sender IP

address and the physical identifier of the terminal that is said sender in said

address coordination table;

- Said duplication notification means includes a means for immediately sending

  a duplication notification packet when the sender IP address of a duplication

  notification packet received from another terminal by said individual terminal

  is the same as the IP address being used by said individual terminal itself,

- Said substitute notification means includes a means for sending a duplication

  notification packet when the sender IP address of a duplication notification

  packet received from another terminal is different from the corresponding

  physical identifier registered in said address coordination table, moreover for

  a specified period of time, other terminals have not sent a duplication

  notification packet.


- In reference to claims 4 and 5

Claims 4 and 5 would be allowed because they are dependent on claim 3.


- In reference to claim 8

Claim 8 would be allowed because the prior record fails to teach or fairly suggest

a wireless communication system according to claim 7 wherein the network on which

said multiple terminals are connected is an IP (Internet Protocol) network utilizing IP

addresses for terminal identifiers and wherein:

- Said advertizing means includes a means for advertizing notification in the

  form of an advertizing packet recording the IP address of said individual

  terminal and a unique physical identifier for that individual terminal to another

  terminal or terminals on the network,

- Said terminal identification means provides an address coordination table

  that, for a specified time, holds the coordination between the IP address of

  each other terminal on said IP network and a physical identifier unique to

  each said other terminal and provides a registration means that operates

  when a sender and IP address of an advertizing packet received by said

  individual terminal from any other terminal is different to the IP address of

  said individual terminal itself, moreover said sender IP address is not

  registered in said address coordination table, to register said sender IP

  address and the physical identifier of the terminal that is said sender in said

  address coordination table;

- Said substitute notification means operates such that when the sender IP

  address of an advertizing packet received from another terminal is different

  from the corresponding physical identifier registered in said address

  coordination table, in addition to sending a duplication notification packet to

  the terminal for that registered physical identifier, provides a means for

  updating the appropriate corresponding physical identifier in said address.

## *Conclusion*

8.     The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure are:

- Hutchison et al. (US 5327534) teaches a system and method for the detection of

   duplicate alias addresses.

- Arndt et al. (US 5708654) teaches a method for detecting proxy ARP replies from

   devices in a local area network.

- Arndt et al. (US 5724510) teaches a method of configuring a valid IP address

   and detecting duplicate IP addresses in a local area network.

- Anderson et al. (US 5850338) teaches protocol analyzer for monitoring digital

   transmission networks.

- Woundy (US 6009103) teaches a method and system for automatic allocation of

   resources in a network.

- Jabbarnezhad (US 6343064) teaches a method and system for remote

   management of equipment having duplicate network addresses.

- Fujimori et al. (US 6542510) teaches a system for implementing ARP and RARP

   type communication.

- Bertrand et al. (US 6687252) teaches a dynamic IP address allocation system

   and method.

- Humpleman et al. (US 6801507) teaches a device discovery and configuration

   method in a home network.

- Arndt (US 6826611) teaches an apparatus and method for automatically obtaining a valid IP configuration in a local area network.

- Asahina (US 6847621) teaches an address resolution method and address resolution communication system.

- Tams et al. (US 6862286) teaches a method of tracking dynamic addresses on a network.

- Spiegel et al. (US 6862284) teaches a format for automatic generation of unique ATM addresses used for PNNI.
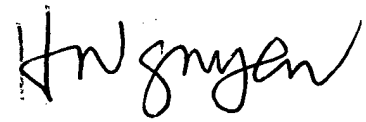
9.      Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Roberts whose telephone number is (571) 272-3095. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BSR
09/29/2005

HANH NGUYEN
PRIMARY EXAMINER